

## The Millennium Series

# Development and Implementation of Novel Community Outreach Methods in Women's Health Issues: The National Centers of Excellence in Women's Health

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### ABSTRACT

Numerous outreach efforts have been employed to educate both lay and professional communities about many medical issues. As part of our contracts with the Public Health Service, Office of Women's Health, Department of Health and Human Services, the National Centers of Excellence (CoEs) in Women's Health have been charged with creating innovative and effective methods of educating these audiences about the major issues involved in women's health. This mission is particularly critical in the arena of women's health, as women are responsible for approximately 75% of the healthcare decisions made by and for American families, and past efforts to provide them with good, evidence-based information have been fraught with difficulties ranging from financial to cultural. We report herein some of our successful novel outreach efforts. A common thread throughout this account is that among the most successful of the outreach activities are those that involve or incorporate existing community groups committed to women's health.

### INTRODUCTION

THE OFFICE ON WOMEN'S HEALTH of the Department of Health and Human Services (DHHS), United States Public Health Service (USPHS), funded 18 National Centers of Excel-

lence (CoEs) in Women's Health via the mechanism of three cycles of competitive contracts. The first six, or vanguard centers, were Magee-Women's Hospital, MCP-Hahnemann, The Ohio State University, the University of California, San Francisco (UCSF), the University of Pennsylva-

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National Centers of Excellence in Women's Health: <sup>1</sup>Indiana University School of Medicine, Indianapolis, Indiana; <sup>2</sup>University of California, Los Angeles, Los Angeles, California; <sup>3</sup>University of California, San Francisco, San Francisco, California; <sup>4</sup>University of Maryland School of Medicine, Baltimore, Maryland; <sup>5</sup>University of Michigan School of Medicine, Ann Arbor, Michigan; <sup>6</sup>University of Washington School of Medicine, Seattle, Washington; <sup>7</sup>University of Wisconsin School of Medicine, Madison, Wisconsin; <sup>8</sup>Wake Forest University School of Medicine, Winston-Salem, North Carolina; <sup>9</sup>Yale University School of Medicine, New Haven, Connecticut.

Since this manuscript was submitted, University of Maryland and Yale University are no longer National Centers of Excellence in Women's Health.

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nia, and Yale University. The second round funded Boston University, Indiana University (IU), the University of California, Los Angeles (UCLA), the University of Maryland, the University of Michigan (UM), and Wake Forest University. In the third cycle, Harvard University, the University of Illinois-Chicago, the University of Puerto Rico-San Juan, the University of Washington, the University of Wisconsin, and Xavier-Tulane University received funding.

The missions assumed by these CoEs included research, education, curricular change, development of leadership programs for women in academic medicine, community outreach, and outcomes assessments. Each CoE, as might be expected, has approached these objectives in its own unique way, in part defined by the culture of its institution and of the surrounding community. As we demonstrate in this report, many novel and valuable techniques have been devised by the Centers. We do not attempt to include every effort, however innovative or successful, at each CoE, as that would result in a prohibitively lengthy tome, but we highlight those that several centers have undertaken that may have widest applicability at other locations or are particularly clever. These programs are grouped as follows: (1) partnering with other community groups dedicated to women's health, (2) CoE participation in existing grass roots efforts within the community, and (3) CoE-initiated efforts. Most of these activities have intertwined within them educational components and elements of healthcare provision, which cannot be completely separated.

## SUCCESSFUL OUTREACH ACTIVITIES

### *Partnerships of CoEs with other community groups dedicated to women's health*

Each CoE has developed one or more variants of this form of outreach. In collaboration with the Indiana State Department of Health's newly formed and funded Office of Women's Health and with the Indiana Commission for Women, the IU CoE organized Indiana's first annual Women's Health Month. The kickoff event occurred on September 8, 1999, with a ceremony at the Statehouse Rotunda in Indianapolis at which the first lady of Indiana read the Governor's proclamation declaring Women's Health Month and the results of a competition for a new grant

program for projects aimed at improving the health and well-being of women throughout the State of Indiana were announced. The director of the CoE, who is a member of the review team for this funding mechanism, welcomed the attendees to the meeting. A mini-health fair was held in conjunction with this event, with booths around the Rotunda lobby representing multiple agencies and groups involved in women's health, including several hospitals, the Indiana State Department of Health, the local Native American organization, insurance companies, minority health coalitions, and groups combating domestic violence.

The UCLA CoE has developed a Community Alliance comprising a variety of partners who meet at the Center quarterly. The goals of the Alliance are to provide community feedback on the development of UCLA's national model for the advancement of women's health at an academic medical center, to develop a group of interested consumers who can provide feedback to the Office of Women's Health on programs and initiatives, and to develop a network of groups interested in women's health that can work with UCLA and, potentially, together to advance women's health, especially in the area of education. The activities of the Alliance have provided a two-way flow of information as well as a constant reality check for the educational needs of women in the Greater Los Angeles area. For example, the featured speaker at one of the Alliance meetings was the program manager of the Iris Cantor-UCLA Mobile Mammography Community Outreach Program. At this meeting, strategies were outlined for outreach to underserved women for screening mammograms. The community partners have helped the CoE market educational programs, and this linkage has been particularly important for programs targeting specialized populations. The resources, both fiscal and in personnel, of most of the Alliance members are severely restricted. The CoE has been able to provide the Alliance members with assistance in translating materials, reviewing and editing proposals for outside funding, and other activities. This consultation relationship also has flowed from the Alliance to the CoE. For example, the feedback received from the Alliance members on materials and environment for disabled and lesbian populations was critical in enabling the CoE to develop effective interventions.

UM is committed to the development of com-

munity partnerships in order to offer women the most comprehensive, coordinated, and compassionate services possible. Through these collaborations, they provide resources and services to enable women to learn more about their health and to connect with community partners to further their care. Volunteers of the Women's Health Resource Center, a health education center for women and their families, developed a community resource guide that features local, state, and national agencies, as well as support and referral services, for women's physical, emotional, and spiritual health. This resource, in addition to the Center's expanding library and patient education materials, is just one component of UM's community outreach activities.

The UM Health System also participates annually in the International Women's Show in Novi, Michigan, on the first weekend of May. Organizations from all over southeastern Michigan participate. Such topics as beauty, health, fitness, nutrition, and finances are presented. The UM Health System sponsors an extensive booth, comprising its major programs, including the CoE. Volunteers and staff of the CoE distribute brochures and various forms of information about women's health to participants.

The State of Wisconsin has provided a strong backdrop against which the CoE operates. The state's first lady has taken a leadership role as a women's health advocate and has played an important part in stimulating the introduction of proposed legislation for a women's health campaign administration, a state smoking prevention program aimed at women and children, and a federal substance abuse block grant to address the needs of pregnant women. The state also has provided support for domestic violence advocacy, adolescent pregnancy prevention, and enhanced well-woman screening programs.

The CoE is working with researchers to address community-identified questions and is working with community networks to recruit research participants. The CoE is continuing its activities in providing information and education to underserved populations in the state. A program on adolescent pregnancy and violence prevention for Native American tribes is building on oral traditions, using intergenerational programming, under a grant from the National Institute of Child Health and Development. A program funded by Head Start is striving to enhance access to health and human services for low-income mothers of

young children through goal setting and individualized advocacy. A study of decision making and satisfaction with care among primarily elderly women with arthritis is funded by the Agency for Health Care Policy and Research.

The CoE is working with health professionals and patients to locate resources, including child care subsidies, to enable women of color and poor women to compete on a more level field as they enter the health professions. The CoE also is focusing on integrating population-specific material and emphasizes into gender-specific changes in the curriculum.

In January, 1999, the Wake Forest CoE and the Forsyth County Library began a partnership to educate the women of Forsyth County, North Carolina. The Carver School Branch Library, located in the predominantly African American community of east Winston-Salem, was chosen as the initial site. The library's immediate surrounding area includes both middle-class and upper-class, educated households. The majority of these households consist of senior citizens. Thus, educating this population became a three-pronged effort: (1) to provide culturally appropriate education, (2) to provide education that would meet the needs of senior citizens, and (3) to provide education of interest to women. The CoE chose six topics on which to concentrate for 12 months: heart disease, diabetes, osteoporosis, Alzheimer's disease, breast cancer, and domestic violence. The topics are presented over the course of 2 months, and as each topic is presented education is conducted via three methods. First, brochures, fliers, and booklets appropriate for people with various reading levels are placed in a section of the library that has been dedicated to the CoE and is strategically located in the front of the library to catch the attention of those who enter. Second, the first month a disease is presented, an informational lecture is given. Speakers are carefully chosen to represent the population, and female speakers are used whenever possible. The speakers are requested to relay the information in an informal and relatively unstructured manner in order to address questions and concerns as they arise. Finally, the second month of a featured topic includes a demonstration that places information introduced during the previous month in a more applicable format. For example, during the month of January, the discussion focused on how heart disease affects women; in February, a cooking demonstration ac-

tually showed how a traditionally unhealthy Southern recipe can be made healthy.

*Participation by CoEs in grass roots community programs*

The Yale CoE explored several avenues for community education. Because Yale is located in a small city in a small state that is rich in well-developed community organizations, the CoE found that it could work more productively and directly with the community by collaborating with selected city programs, as well as with some within the University, rather than by competing for scarce resources by initiating completely new programs.

The New Haven Public Health Department, in cooperation with the Yale CoE, has agreed to establish women's health clinics in selected public schools to address the healthcare needs of two age groups of women: mothers who are bringing their children to school and adolescent women in school. The CoE collaborates with a community organization, Colored Women and Partners Fighting Heart Disease, on various activities, including public education through health fairs and talks. The group brings together women from professional fields, such as social work, academia, health organizations, and community action agencies, to provide healthcare information and services to underserved women.

The Urban Health Program is a project of the Yale Department of Public Health and is part of a broader program established by the Yale School of Medicine, the Yale-New Haven Hospital, and the City of New Haven. The goal of the Urban Health Program is to encourage collaborations among the students and faculty of Yale's Schools of Public Health, Medicine, and Nursing and with the community for the benefit of New Haven and its residents. Focusing on urban issues, the Urban Health Program offers formal courses, a lecture series, faculty and student research, student community volunteer activities, and interdisciplinary student community practicum experiences.

In conjunction with some of these community groups, the Yale CoE has participated in several effective conferences and programs. The Women's Health and Fitness Conference, a 2-day meeting sponsored by Yale University, Yale School of Medicine, and the Yale-New Haven Hospital, was held in 1998. A series of lectures and workshops was presented on a wide spectrum of health issues of interest to women, and keynote

speaker Rebecca Lobo, former University of Connecticut basketball star, addressed an audience of both lay people and healthcare professionals. A second conference was held in October 1999.

*Programs initiated by CoEs*

*Indiana University.* A gift from the Anthem Insurance Co. enabled the IU CoE to hold a lectureship in women's health in February, 2000. The speaker was Wanda Jones, Dr.P.H., Director, Office on Women's Health, USPHS. Funding has been raised through contributions from a variety of donors to create the endowed annual Doris H. Merritt, M.D., Lectureship in Women's Health, beginning in 2001.

Each year, the IU School of Medicine presents a mini-medical school program on health topics of interest to the lay public. The program was begun 5 years ago and has been very successful, with attendance by at least 70 people at each session. It consists of seven evening sessions, each lasting 2 hours, for a period of 6 weeks. The fall 2000 session was dedicated to women's health for the first time, organized by the CoE, and included talks on domestic violence, cardiovascular disease in women, sexually transmitted diseases, breast cancer, geriatric issues, and fitness.

The IU School of Medicine has developed a successful generic, that is, gender-neutral, smoking cessation program in collaboration with the IU School of Dentistry. Because of previously described differences in the ability of women to stop smoking compared with men the CoE is conducting focus groups for women to create a cessation program specifically designed for them. Additionally, the CoE will be collaborating with Girls, Inc., and the Ruth Lilly Health Education Center (not related to the pharmaceutical company) to develop programs to prevent girls and adolescents from beginning to smoke in the first place.

The IU CoE is coordinating collaborations and interactions among a variety of programs both at IU and in the community targeted toward education, intervention, and prevention of domestic violence, specifically violence directed against women. An educational, interactive CD-ROM program has been developed for teaching medical students and will be modified for lay individuals in various community health clinics associated with the CoE, as well as for healthcare professionals. The CoE's junior faculty outreach project targeted adolescent and young adult

women in one of these community centers and included one-on-one counseling, discussion groups and support groups, and educational interventions. This effort occurred in conjunction with the Centers of Hope at the community hospital, the Wishard Memorial Hospital, which cares for women who are the victims of sexual and other abuse, as well as with several centers for battered women and children in the city. Ultimately, these programs will be exported to other cities and rural communities throughout the state.

The IU CoE has received an annual gift from Quilt America! to defray the costs of mammography for underinsured and uninsured women in Indiana. This has enabled the CoE to provide these services to all employees and their female relatives at Wishard Hospital and its affiliated clinics by enclosing a voucher for a mammogram in their pay envelopes. It has also allowed the CoE to provide these services to women in the community and in rural Indiana, both on-site at Wishard and Indiana University Hospital and off-site via the mobile mammogram van. Additionally, as part of Women's Health Month in September, the first lady of Indiana rode in the van to small communities throughout Indiana, where both mobile mammography and bone densitometry, the latter performed via sonography, were provided free of charge to all who wanted to participate.

*University of California, Los Angeles.* The Iris Cantor-UCLA Women's Health Education and Resource Center, a component of the UCLA CoE, has created an annual Top 10 list of "high-profile women who have made significant efforts towards women's health education," which is widely published both externally and internally. The first group was named in 1998 and included individuals who are actively promoting women's health issues around the country and who have focused on diverse women's health topics. The rationale for this list is based on the tremendous influence that celebrities have on public education. The goals of creating this annual recognition are to acknowledge the value of their efforts in educating women about critically important health topics, to motivate continued use of their celebrity in women's health education issues, and to encourage other high-profile women to do the same.<sup>1</sup>

This CoE has developed a Prescription for Patient Education to enhance the integration of pa-

tient education and clinical services. The rationale for the development of the prescription was based on three principal factors: (1) the time physicians can spend with patients is increasingly limited, and use of the prescription allows the physician to spend more time on diagnostic and treatment issues and less time on preliminary education, (2) the CoE has observed that when the physician prescribes this education, the patient is more likely to consider the information important than if the information is imparted in other ways, and (3) perhaps most importantly, the prescription allows the patient to receive education on issues pertinent to her health and become a more informed, empowered healthcare consumer. After many focus groups and much input, a prescription was created on a pad that can fit into a standard laboratory coat pocket and includes a map of the Center on its reverse side. The prescription is printed in a format that is the same size as but a different color from the standard medical prescriptions in order to obviate confusion by physician or patient. The prescription lists 32 of the most common health issues seen by general internists at UCLA and is currently used by general internists, physicians who practice in such specialties as cardiology and breast imaging, and physicians who practice in satellite offices. Additionally, a second prescription has been developed for the obstetrics and gynecology department with topics specific for the needs of their patient population.

Use of the prescription is quick and easy for both physician and patient. The physician must complete a limited amount of information, and the patient is directed to the Women's Health Education and Resource Center, which is usually not far from the physician's office. She is given a prepared packet of informational materials on the topic in question. If the requested topic is not listed on the form, the physician simply writes it in under the "other" category. For those patients whose time constraints prohibit them from coming to the Center following a physician's appointment, information can be mailed. In such cases, either the physician will complete the prescription form and indicate the information that needs to be sent or the patient can call the Center and state that she has a prescription for a particular topic.

*University of California, San Francisco.* Women's Health 2000 is an educational program created by

the CoE in response to women's desires for accurate and cutting-edge health information. The UCSF CoE cosponsors the annual Women's Health 2000 conference with the Obstetrics and Gynecology Research and Education Foundation. For the last 3 years, the director of the CoE has served as program chair for this event. Over 400 women have attended the conference each year. Each attendee receives a Resource Guide, which includes background information on each topic presented, key findings or take-home points from the sessions, and a comprehensive list of additional sources of information from organizations, books, and websites. This day-long conference offers over 25 sessions that target issues, concerns, and challenges women face in seeking good health and balance. Over 40 leading researchers, health providers, and advocates present workshops that cover social, political, and health issues important to women.

In October, 1998, the CoE convened, for the first time, a group of clinicians, health educators, and pharmacists to evaluate how best to develop a training program for the community on the subject of menopause. The group designed a program for women between the ages of 40 and 60 that would be offered three times a year. The first all-day program was held in June 1998 and not only addressed the often confusing physical changes of the perimenopause but also explored the most current research and information on options for maintaining and maximizing women's health after the menopause. Scientific data on both traditional and alternative management strategies were presented.

Recruitment and retention of women subjects into clinical trials has been problematic historically because of lack of attempts by physicians and lack of trust, time, and energy by women. To try to address and rectify this problem, the CoE developed a *Women's Health Research Bulletin* to inform women about opportunities for participation in clinical research, which is organized into topical areas of study, for example, obstetrics and gynecology, general health, and mental health. The *Bulletin* is published quarterly and is disseminated throughout the community.

*University of Maryland.* The Women's Health Resource Center at the University of Maryland's CoE was established in October 1998 and currently houses approximately 1000 titles for consumers and healthcare professionals. Topics include a

wide range of issues important to women. Resource formats include books, magazines, binders, videotapes, audiotapes, brochures, and pamphlets. The Resource Center also contains a laptop computer that offers access to the Internet via the CoE's website. In April 1999, a Resource Center specifically for health professionals was initiated and already contains over 90 titles, including lesson plans, educational programs, and so on.

The CoE has had a Women's Health Kiosk in the atrium of the University of Maryland Medical Center since February, 1998. Over 62,000 pieces of literature were distributed during the kiosk's first year. In the most recent quarter, the kiosk gave out over 16,000 more items. It has grown since its inception from 206 to 400 bulk titles. Each month, the front of the kiosk features literature relevant to a specific health topic in accordance with federal health observance. The most popular health education materials are those related to cardiovascular health, nutrition, and mental health. The most difficult resources to supply have been in the areas of diabetes, nutrition, cardiovascular health, digestive diseases, and physical fitness because of a paucity of existing titles on these subjects.

The CoE has developed an ongoing program called Self-Help: A Woman's Guide to Wellness, which is a monthly lunchtime series dedicated to women's health issues. The CoE has organized and hosted 36 workshops/seminars for women. Monthly presentations are given on topics as diverse as osteoporosis and financial planning. Over 400 women have participated in these events.

A monthly consumer newsletter is distributed to approximately 300 women, listing educational opportunities and programs in the Baltimore/Washington area. The newsletter also lists the self-help programs offered at the CoE.

*University of Michigan.* The UM CoE sponsors several annual community health events. Health Night Out is a quarterly series of open discussions about a wide range of women's health topics and is held for and within the community. These sessions offer lectures by multidisciplinary teams of healthcare providers and address such topics as urinary incontinence, preconception planning, osteoporosis, and gynecologic cancer.

For Breast Cancer Awareness Month in October, 1999, the UM CoE offered two seminars on breast health and genetic testing for the community, in addition to several hospital-focused

health education campaigns to increase awareness. In March, 1999, UM sponsored Teen Health Month, offering educational and social events for teens in local community centers.

UM developed Women's Health Day in 1998 as a 1-day conference on women's health for the community. This event provides women with an opportunity to listen to experts on a variety of women's health subjects. Participants also can take advantage of free health screenings, such as breast examinations, bone densitometry, and cholesterol testing, while attending a resource fair where representatives from community health organizations are available to answer questions about their services. The program is designed to reach out to underserved women. Over 400 women attended Women's Health Day, 1998. The September, 1999, conference focused on women's health from a multicultural perspective. It was held in a local high school in Ann Arbor and drew over 500 women.

*University of Washington.* The University of Washington serves as the only medical school for Washington, Wyoming, Alaska, Montana, and Idaho. Collectively referred to as the WWAMI region, the populations of these states are primarily rural, with the exception of the Puget Sound area of Washington, which includes Seattle and is home to a multi-ethnic, multiracial population. Exposure of University of Washington medical students to medical practices serving these communities is provided through the Rural and Underserved Opportunities Program (RUOP). During the summer months between a student's first and second years, participants spend 1 month in host communities under the supervision of a clinical preceptor. This well-received program is in its tenth year, and students have recently expressed the desire to "give something back" to the host community in the form of health education programs. This desire and the existence of well-established community links provided an ideal mechanism for the creation of a CoE educational outreach effort. This effort, the Student Community Outreach Project (SCOP), was launched in May, 1999.

Osteoporosis was the first health topic selected. Washington State has an above average rate of hip fractures in persons over 65 years of age, and hip fractures are currently the second most common cause of hospitalization for older women.<sup>2</sup> Osteoporosis is now a preventable, treatable dis-

ease, yet a gap exists between medical science and public knowledge about the condition. No large-scale comprehensive osteoporosis education projects exist in the WWAMI region. Student volunteers in this first year of the SCOP attended an informational workshop presented by members of the Department of Medicine, School of Nursing, and a clinical nutritionist. Topics included (1) background information on osteoporosis as a public health problem, (2) effective prevention strategies, and (3) stages of change of a health education model. The students also were provided with a Patient Education Kit developed by the National Osteoporosis Foundation. This kit contains basic information on osteoporosis, age-specific information that can be used appropriately to target the audience, and suggestions for contacting and working with local media. Once the students reached their community sites, patient education pamphlets on a variety of osteoporosis-related topics were shipped to them. The community preceptor was enlisted to help identify venues for the students' presentations, such as community events, retirement homes, grocery stores, and 4H groups. Focus groups of the student participants will be conducted to assess the experience for use in planning. Future plans for the program include expansion into other topics and into other health science school training programs, including the physician assistant and nurse practitioner programs.

Another community outreach program of the CoE is aimed at improving participation in disease prevention and healthcare maintenance programs, such as breast cancer screening, among minority and underserved groups. Harborview Medical Center (HMC), the community hospital associated with the University of Washington, and its outpatient clinics serve an ethnically diverse and economically disadvantaged population. Review of breast cancer diagnoses at HMC shows a low rate of mammography compliance, a low rate of diagnosis of early cancers, and a disproportionately high rate of later-stage breast cancers, reflecting a need for innovative outreach programs. Based on these data, the CARE-A-VAN project was conceived and launched. The Women's Health Outreach Program and CARE-A-VAN are a joint project of the University of Washington and HMC in operation since April, 1998. This program offers culturally sensitive breast health education programs to medically underserved populations,

including economically disadvantaged women, women of color, non-English-speaking women, and elderly women. The program is funded through grant support from Avon/NABCO (National Alliance of Breast Cancer Organizations), the Susan G. Komen Foundation, the University of Washington Service League, and others. Contact with the women is made through community organizations serving minority or underserved populations by phone calls, mailings, and promotions at community events. These organizations invite the women and provide the venue. The fully equipped outreach CARE-A-VAN travels to the location, bringing paid trained staff, volunteers, educational materials, and refreshments. The volunteer staff of approximately 40 multi-ethnic, bilingual volunteers has been particularly critical to the success of the project. The program has obtained or developed educational materials in English, Spanish, Cambodian, Laotian, Mandarin Chinese, Korean, Vietnamese, Tagalog, and Russian. Breast self-examination teaching models and videotapes are available. As an incentive to attend the presentation, personal care items and other gifts provided by Avon and Garden Botanika are distributed to attendees. Women who want health-care referrals and mammographic services are accommodated and receive services through the King County (Seattle) Breast and Cervical Health Program or the YWCA Encore Program. In its first year of operation, the CARE-A-VAN program provided educational programs at domestic violence shelters, food banks, retirement nursing homes, non-English-speaking communities in the international district of Seattle, housing assistance/homeless shelters, and community events.

*University of Wisconsin.* The CoE is striving to improve public awareness of women's health issues. A workshop is being developed to train women to become effective healthcare advocates. A medical school/law school patient advocacy course for people with life-threatening illnesses is in its formative stages. The CoE is participating in a coalition campaign to reach clinicians and consumers regarding the diagnosis and treatment of postpartum depression.

*Wake Forest University School of Medicine.* In an effort to reach the working woman, the Women's

Health CoE at Wake Forest began a partnership with Wachovia Bank. The CoE has offered lectures for the female employees of the bank and their family members. The series ran from February through June of 1999. Topics included heart disease, exercise and pregnancy, breast cancer, and menopause. Each discussion was held at the main office of the bank and was offered at 7 PM. Educational materials were provided, along with CoE incentives (e.g., key chains, notepads), for all who attended, and the bank provided refreshments. Beginning in the fall of 1999, the CoE initiated a similar partnership, now called Work Place Seminars: Health after Hours/Lunch and Learn, with the Integon Insurance Corp. The human resources officials at this company thought that lunchtime discussions on the company's premises would be better for their employees. A demographic study of the company indicated a large number of women of childbearing age; therefore, topics encompassed issues related to pregnancy. Integon has videotaped the sessions, so that they can be presented at worksites in other cities and states. As at Wachovia, the CoE provided educational materials and incentives for attendees.

The CoE has developed a health risk assessment tool that has been pilot-tested and distributed to women at various community events in the Winston-Salem area. Women's responses to the risk assessment are used to decide which educational materials will be of greatest benefit to other women. Following the event, materials are mailed to women on the health topics considered most appropriate. Because of the diverse venues in which the risk assessments can be used, three versions have been created. The community health risk assessment is four pages long and covers medical history, screening history, family history of disease, nutrition habits, contraception, and preventive healthcare habits. There also is a health fair health risk assessment, designed to take only a few minutes to complete. It is a two-page modification of the longer community assessment. The clinic health risk assessment, which will be used in the CoE clinics, is a replica of the community assessment, with the addition of inquiries about domestic violence.

The Wake Forest CoE has developed a program called Taking Care of Our Sisters, a multidimensional program designed to encourage, educate, and promote good health for women of all ages.



It will provide opportunities for women to receive health information in environments that are both comfortable and nonthreatening. The program will be taken to places in the community where women have traditionally felt comfortable, for example, malls, churches, community centers, and civic and community club meetings. A special feature of the program will be its focus on minority and underserved women in the community. As part of this program, community education classes will be held twice a month and will be targeted to women who live in low-income housing managed by the Housing Authority of Winston-Salem (HAWS). Bimonthly classes will be held in four of the larger, more active housing communities with which the CoE has had previous experience. Women from smaller communities will be transported using the transportation systems of the public housing communities. Community classes will last approximately 1 hour and will provide information on health topics of interest, including Diabetes Care, Getting Your Legal Affairs in Order, Skin Care through the Ages, and Why Do I Need a Physical? These classes will present pertinent information to women who cannot be reached through more traditional health education methods.

Another facet of the program is church based, providing information for women in a place where many of them go on a regular basis. The types of activities involved in the church-based program will include colorful church bulletin inserts on a quarterly basis, a list of services to inform church leaders of places where women can get help, a list of speakers and printed materials that Taking Care of Our Sisters could provide when planning church activities targeting women. The program will also connect with a female leader in the church to set up information areas, posters, and displays. Churches that desire a more intensive program will be able to have the designated leader trained in women's health so that she can coordinate activities for female members.

The third aspect of the Taking Care of Our Sisters program is Beautiful Inside and Out, which will be conducted in conjunction with a local mall. This promotion will be a total mall effort to encourage women to recognize the inner unseen beauty of good health and outer beauty of being fashionable and trendy. The highlight of this mall activity will be a fashion show that will feature

local women from area churches and civic organizations.

*Yale University.* Because one of the major concerns identified among women is domestic violence, the Urban Health Program has sponsored an annual conference on this subject for each of the years 1998 and 1999. In addition, a workshop on violence related to handguns, its effects on women and children, and injury prevention was held in September, 1998. A statewide, day-long conference for adolescent women was held in May, 1999. The Yale CoE participated in this event by providing speakers for workshops on health and leadership. The event was attended by nearly 200 young women.

To develop lay leadership for healthcare policy and advisory and review boards, the Yale CoE has collaborated with the office of the secretary of Yale University, the School of Public Health, and the New Haven Chamber of Commerce to develop the role of women's health in a consumer leadership training course offered annually by the Chamber. The Chamber of Commerce runs a long-established Community Leadership Training Program for individuals in business, social service, education, and other areas to develop their leadership and community participation skills. The intensive year-long program features speakers and seminars covering a variety of community issues, such as homelessness, political activism, and nonprofit organization administration. The program has graduated students who now fill critical leadership positions in New Haven's public and private agencies. The CoE has access to the roster of Community Leadership graduates. Through the sponsorship of the CoE and the office of the Secretary, an applicant was accepted in the academic year 1998 program and participated free of charge. This CoE participant is completing a project on family day care in the Greater New Haven area. The community project involves recruiting and training women without employment or job skills to become day-care providers. The team meets with inner city neighborhood networks that support women in their efforts to implement family day-care in their homes. The training includes sessions on the safety and health of children. In addition, a listing of community health resources developed by the CoE was disseminated to the day-care providers dur-

ing their training. The providers were given several copies of the inventory to share with mothers who use their day-care services. In this way, the CoE is helping to increase knowledge about community resources among mothers and day-care providers.

In 1998, the Yale-New Haven Hospital created a web-based newsletter, *HealthLink*, that is available to its patients and families. The free service provides subscribers with online notices of breaking news in four subject areas: cardiology, oncology, pediatrics, and women's health. Insights about the news items are provided by Yale Medical Center experts. *HealthLink* also disseminates information about related hospital services and advanced treatments, advice on preventive measures, and notices of related screenings, support groups, and educational events.

A major database, the New Haven Public Health Project, is being developed by Yale Cushing Whitney Medical Library. Funded by the national Library of Medicine, the Yale CoE is collaborating with the Ethel F. Donaghue Women's Health Investigator Program at Yale and the Yale Department of Public Health to coordinate data collection for this publicly accessible website. The website will serve as a guide for faculty, researchers, students, administrators, health officials, community organizations, and others interested in the public health of the Greater New Haven area. The database contains statistics, publications, and other data that make it possible to generate reports directly from the website. Links are provided to information elsewhere on the net.

## DISCUSSION AND SUMMARY

This cross-section of the innovative community outreach activities of just half of the CoEs provides a sense of the diversity of programs employed and the creativity that has inspired them. Some of them are totally new to their environments, whereas others have built on existing activities and resources. However, as noted earlier, one common theme is evident in all of these CoEs: an integral part of many of the most successful outreach programs is collaboration and coordination between the CoE and existing community groups, from state agencies to patient advocacy groups. Instead of duplicating already extant services, the CoEs have made even more substantial

contributions to their communities through interactions with other groups involved in women's health.

The objectives of virtually all of the programs described are to improve education of lay women about various significant areas of women's health, to enhance community awareness of these health issues, and to create two-way communications between the healthcare professionals of the CoEs and the community. Some of the programs also seek to improve women's access to healthcare through community clinics. Although it is still too early for formal evaluation of the results of these various programs, there are indications that many are successful. For example, the number of women attending many of these activities is growing, the communities have demonstrated their interest in continuing these programs and even initiating new ones, and agencies and groups collaborating with the CoEs in these projects have expressed enthusiasm about the projects and a desire to initiate new ones.

The formal criteria that ultimately will be used to evaluate these activities obviously will vary depending on the programs involved. For example, some of these projects might best be assessed by the numbers of participants and, where appropriate, the numbers who continue to participate in programs if the programs are long-term. Other projects will need to be evaluated for such outcomes as changes in health-related behaviors (e.g., weight loss, smoking cessation, amount of exercise). Some of these outcomes may require fairly complex analyses of multiple variables, whereas others should be relatively straightforward.

It is too early for a formal assessment of what the CoEs have learned to date based on their experiences in many of these programs, although a number of such outreach activities were ongoing before formation of the CoEs. Thus, some general points can be made from our collective experiences with such programs: (1) the most successful and long-lived are those that include community participation in their conception, design, and implementation, (2) those programs that are most convenient for participants to access will be the best received, and (3) feedback from participants and modification of these programs in accordance with this feedback should be part of any successful program. We anticipate learning a great deal more as these programs continue.

We hope that these projects will provide to other sites ideas for creation and implementation of their own home-grown or imported programs. Many of the programs described are not expensive to implement or can be implemented with support from corporations, community organizations, and other schools. All have proven beneficial to target audiences and CoEs alike. Future outcomes evaluation of these programs will help other sites to determine what interventions might be most suited to their communities.

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